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ARTICLES

Effects of Modernisation on Rural Credit Markets: A Case Study from Tamil Nadu

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I

INTRODUCTION

This paper investigates the effects of rural banking and credit policy on the structure of a village credit market. Based on a case study of a relatively advanced village in Tamil Nadu, the paper attempts to illustrate some aspects of change in the structure of rural credit markets. A distinguishing characteristic of rural credit markets in India, as in other developing countries, is the co-existence of two distinct sectors of credit: the formal sector which comprises commercial banks, co-operative credit societies and other financial institutions, on the one hand, and the informal sector, which includes a wide variety of lenders in the village, on the other. Transactions in the formal sector are rule-based and regulated, to some degree, by the state as compared to transactions in the informal sector that are of a personalised nature and not regulated. These basic distinctions across sectors translate into many other differences such as a divergence in interest rates across the two sectors. The characterisation of rural credit markets as segmented refers to the existence of two distinct sectors as well as to a differential access of borrowers to the two sectors.

A striking feature of our rural society has been the exclusion of large sections of the population, particularly agricultural labourers, artisans and poor peasants, from the network of formal credit institutions. Data from different rounds of the Rural Labour Enquiry (RLE) are very revealing in respect of the extent to which agricultural labourers were left out of the modern banking system (see Ramachandran, 1990). In 1964-65, only 0.4 per cent of the debt incurred by agricultural labourers came from co-operative societies and banks. By 1974-75, the share of co-operatives and banks in the debt of agricultural labourer households had risen to five per cent. In recent years, massive changes appear to have occurred in the rural credit market, in particular, the coverage of bank lending among rural households has widened.

The growth of rural banking has been actively promoted by the Government of India since it nationalised fourteen major commercial banks in 1969. Among other measures, directives of the Reserve Bank of India have specified targets for the expansion of rural branches, ceilings on interest rates, and guidelines regarding the sectoral allocation of credit. Implementation of the recommendations of the Narasimham Committee would mean a reversal of many of these policies and would lead to a reduction in the flow of financial resources to rural areas. Credit has also been channelled to rural areas through specific schemes targeted at the poor. The most important of these are the Integrated Rural Development Programme (IRDP), and its predecessors, the Small Farmers' Development Agency (SFDA) and the Marginal Farmers' and Agricultural Labourers Agency (MFAL) Programme.

In this paper, village data collected in south-western Tamil Nadu are used to trace some

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of the effects of this credit policy - what can be termed the modernisation of the rural credit system - on differential access to sources of rural credit. The limited objective of the paper, based as it is on a non-generalisable case study, is to discuss some findings of interest about changes in rural credit markets that can stimulate discussion and raise questions for further study.

II

THE DATA SET

The primary data used in this paper are based on two surveys conducted in the village of Gokilapuram, located in Uthamapalayam taluk of Madurai district, Tamil Nadu. In 1977, a complete census type socio-economic survey of all households resident in the village was undertaken (see Ramachandran, 1990). In 1985, a re-survey of a sub-set of these households was undertaken by the author and the panel data were thus obtained for 83 households resident in Gokilapuram for the two survey years (Swaminathan, 1989). The households surveyed in the second round were selected from the original list of resident households so as to obtain a roughly proportionate representation of all socio-economic classes in the village. (Neither 1977 nor 1985 was an abnormal agricultural year in the region.)

Gokilapuram village is in the Cumbum Valley, a geographical region characterised by the adoption of modern farming practices on irrigated farm land. (The Valley roughly coincides with Uthamapalayam taluk.) The Cumbum Valley has a relatively assured system of surface irrigation which supports the cultivation of high-yielding paddy. Paddy yields are among the highest in the country and compare favourably with the yields in South-East Asia (Ramachandran, 1990). The region also has a diversified system of commercial cropping on land irrigated by wells. The area has a relatively well developed transport and infrastructural base, it has an established agricultural extension system, and an extensive network of formal credit institutions.

The surveys canvassed information on several socio-economic characteristics of households. Comprehensive data were collected on household asset ownership.[1] In addition, detailed information was collected on credit variables including the date, source and purpose of borrowing, the interest rate and collateral on each loan, the total amounts borrowed, repaid and outstanding. As information on borrowing is more reliable than on lending; estimates of debt are built up from the borrower side. Furthermore, as it is difficult to identify the demand and supply schedules for credit separately, the variable that is considered in this paper is the 'outcome' variable, namely, the amount borrowed.

III

CHANGES IN THE AGRARIAN CREDIT MARKET OF GOKILAPURAM, 1977-85

When commercial banks were nationalised in 1969, there were a total of 113 rural commercial bank branches in the state of Tamil Nadu. In 1977, the number of commercial bank branches in rural areas was 770 which more than doubled to 1,683 by 1985. The volume of credit disbursed by commercial banks in Tamil Nadu also grew rapidly, expanding from Rs. 45 million in 1969 to Rs. 1,051 million in 1977 and Rs. 5,844 million in 1985 (all at current prices).

At the district and taluk level (Madurai and Uthamapalayam, respectively), there has also been an expansion in bank branches and lending by commercial banks, co-operative

banks and other financial institutions. Loans issued by the apex co-operative institution in the district, the Madurai District Central Co-operative Bank, for instance, tripled between 1980 and 1984, from Rs. 395 million in 1980 to Rs. 1,195 million in 1984. At the branch level, in Uthamapalayam, annual credit issued by the co-operative bank increased from Rs. 2.1 million in 1980 to Rs. 5.7 million in 1984. Banking intensity, a commonly used indicator of the spread of banking, was 15,702 persons per bank branch in 1985 in Uthamapalayam taluk. This fulfils the target set by the National Bank for Agriculture and Rural Development (NABARD) requiring the establishment of a rural bank branch for every 15,000 persons.

Access to Formal Credit

A priori, it can be argued that a household's initial economic status is an important factor in gaining access to formal credit. Among the many reasons for this assumption, an important factor on the lender's side is that banks generally prefer borrowers with certain types of collateral, say land. On the borrower's side, the capacity to offer collateral varies with the economic position of the household. It has been shown that the use of collateral securities is one basis for the continued segmentation of rural credit markets with lenders in the two segments of the market accepting different types of collateral and borrowers from different economic classes offering different types of collaterals.[2] A variable that is a good proxy of the long run economic status of a household and reflects the quantity and quality of collateral available to a borrower is household wealth.

To examine the relation of household wealth to the distribution of formal credit in the village, all households in the panel were divided into four broad asset categories (Tables I A and I B). The evidence shows unambiguously that the distribution of formal credit

TABLE I A. PERCENTAGE SHARE OF FORMAL CREDIT ACCRUING TO HOUSEHOLDS WITH DIFFERING LEVELS OF ASSETS, GOKILAPURAM, 1977 AND 1985

Asset category (Rs.)	1977 Percentage share of			1985 Percentage share of		
	Households	Credit	Assets	Households	Credit	Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0<5,000	45.7	16.2	1.1	37.3	9.9	0.6
5,000<10,000	18.1	18.9	1.7	20.4	9.1	1.1
10,000<50,000	19.2	10.8	6.0	26.5	13.7	5.1
50,000+	16.8	54.0	91.2	15.6	67.1	93.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE I B. PROPORTIONATE SHARE OF FORMAL CREDIT ACCRUING TO HOUSEHOLDS WITH DIFFERING LEVELS OF ASSETS, GOKILAPURAM, 1977 AND 1985

Asset category (Rs.)	P_1 Per cent of formal credit/ per cent of households		P_2 Percent of formal credit/ per cent of assets	
	1977	1985	1977	1985
(1)	(2)	(3)	(4)	(5)
0<5,000	0.35	0.26	14.70	16.50
5,000<10,000	1.00	0.44	11.10	8.30
10,000<50,000	0.56	0.51	1.70	2.70
50,000+	3.20	4.30	0.60	0.70
Total	1.00	1.00	1.00	1.00

Note: P_1 and P_2 are the proportionate shares of credit received by different groups in relation to their share of total households and assets respectively.

resources was more equal than the distribution of assets in both years.[3] Households in the lowest asset category (with assets worth less than Rs. 5,000) received a share of credit that was significantly higher than their share of total assets. Nevertheless, the distribution of formal credit across households from different economic strata remained unequal with the lowest asset group, which accounted for 46 and 37 per cent of all households in 1977 and 1985 respectively, receiving only 16 and 10 per cent of the total credit allocated. Secondly, in proportionate terms, changes in the access to formal credit of households belonging to the lowest wealth category over the study period were mixed; their share of credit relative to asset ownership increased but their share relative to the number of households declined (Table I B). In real terms the average borrowing per household from the banking sector increased among all four asset groups in the period 1977-85 (Table II). (All estimates of credit refer to real values deflated by the Index Number of Wholesale Prices for Tamil Nadu).[4]

TABLE II. AMOUNT BORROWED FROM THE FORMAL SECTOR, 1977 AND 1985

Asset category (Rs.)	Average amount borrowed (in 1977 rupees)		Change (%)
	1977	1985	
(1)	(2)	(3)	(4)
0<5,000	88	229	+160
5,000<10,000	503	1,546	+207
10,000<50,000	344	1,998	+481
50,000+	12,957	17,708	+37

Note: The deflator used is the Index Number of Wholesale Prices for Rural Tamil Nadu.

TABLE III. VARIABLES USED FOR PROBIT EQUATIONS, GOKILAPURAM

Variable	Number of households	Average per household (in 1977 rupees)	Explanation
(1)	(2)	(3)	(4)
Assets (1985)	83	1,31,883	Value of household assets in 1985
Assets 1977	83	79,043	Value of household assets in 1977
Land assets 1985	83	1,07,447	Value of land owned in 1985
Land assets 1977	83	58,031	Value of land owned in 1977

Note: Household assets include all types of land, other agricultural assets, livestock and draught animals, assets used in business activity, gold, housing and other consumer durables. Financial assets were counted but were owned only by a few households. It was not possible to estimate human wealth.

To check whether there is any statistical basis to the observed pattern of allocation of credit, the association between household wealth and access to formal credit was tested using a qualitative dependent variable model. A household's access to formal credit, y, is defined categorically as

$$y = \begin{cases} 1 \text{ if the event occurs,} \\ 0 \text{ otherwise.} \end{cases}$$

and the event is said to occur if a household receives at least one loan from the formal sector.[5] The probability of access is assumed to be a linear function of explanatory variables that include wealth.[6] Estimates of a probit model for explaining access to formal credit as a function of certain borrower characteristics are reported in Tables IV A and IV B. Variables used in the estimation are defined in Table III.

Various borrower characteristics such as caste status, occupational category and prior indebtedness were initially included but the only variables with significant coefficients were household assets in equation 1 and land assets in equation 2 in the probit estimates for 1977 (Table IV A).[7] This indicates that a higher level of assets, particularly land, raised the chances of a household obtaining bank credit in 1977. Estimates of the same equations for 1985, shown in Table IV B, are very different. Firstly, none of the coefficients in the estimated equations was significant.[8] Secondly, the overall fit of the equation was poor. In other words, wealth, caste status and occupation were not important in determining a household's access to formal credit in 1985. Note, however, that access was defined here in a narrow sense and took no account of the magnitude of formal credit or the type of formal credit (subsidised versus general) received by households from different socio-economic strata.

TABLE IV A. PROBIT ESTIMATES FOR ACCESS TO CREDIT FROM THE FORMAL SECTOR, GOKILAPURAM, 1977

Variables (1)	Estimated coefficients	
	Equation 1 (2)	Equation 2 (3)
Constant	-0.9*	-0.9*
Assets 1977	0.13×10^{-4}***	-
	(2.52)	
Land assets (1977)	-	0.20×10^{-4}**
		(2.6)
Chi-square	23.5	24.1
Log-likelihood	-39.8	-39.5
Significance level	0.23×10^{-8}	0.14×10^{-8}

Note: As total assets and land assets are correlated, they have been estimated in separate equations.
Figures in parentheses are t-values. *,**,*** significant at 5 per cent, 10 per cent and 15 per cent respectively.

TABLE IV B. PROBIT ESTIMATES FOR ACCESS TO CREDIT FROM THE FORMAL SECTOR, GOKILAPURAM, 1985

Variables	Estimated coefficients		
	Equation		
	(1)	(2)	(3)
Constant	0.13	0.15	0.14
Assets (1985)	0.56×10^{-6}	0.19×10^{-5}	-
	(1.1)	(1.2)	
Assets (1977)	-	-0.18×10^{-5}	-
		(-1.1)	
Land assets (1985)	-	-	0.38×10^{-6}
			(1.1)
Chi-square	2.1	4.0	2.3
Log-likelihood	-54.4	-54.5	-55.3
Significance level	0.13	0.13	0.12

A wealthy land owning household, which can offer different types of collateral, and has a diversified income base, is likely to receive more formal credit than a poor landless household that has access to formal credit only through specialised credit programmes such as the IRDP. Those receiving loans from the IRDP tend to be one time beneficiaries and do not necessarily gain regular access to bank credit. Furthermore, the new found access to banks among the poor is often indirect such as through an intermediary (perhaps a patron), and again, represents a limited kind of access.

To take note of the scale of bank credit, households were subdivided into two groups: those with loans of less than Rs. 3,000 and those with loans of more than Rs. 3,000 from the banking sector. The cut-off point was based on the observation that the most frequently issued IRDP loans, loans for milch cattle, were worth less than Rs. 3,000. Clear differences were noted between households with a small volume of formal credit, averaging Rs. 2,244 per household and those with a larger volume of borrowing from the formal sector (Table V). The aggregate value of household assets owned by the latter group, for example, was found to be ten times that owned by the former group.

TABLE V. DISTRIBUTION OF FORMAL CREDIT BY MAGNITUDE OF FORMAL CREDIT, GOKILAPURAM, 1985

(Rs.)

Extent of formal credit	No. of households	Loans	Amount borrowed		Household assets	
			Total	Average	Total	Average
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 3,000	18	19	40,400	2,244	9,18,704	51,039
More than 3,000	31	57	5,43,930	17,546	1,63,75,095	5,28,229
All loans	49	76	6,24,730	11,925	1,72,83,799	3,52,934

Note: All values are in 1985 rupees.

Although few in number, other panel studies on rural credit markets point to the existence of links between borrower characteristics, particularly household wealth and access to different sources of credit.[9] Based on data for 104 households in three villages of South India for the period 1975-76 to 1984-85,[10] Binswanger and Rosenzweig (1986) report that borrower wealth increases the probability of getting credit from commercial banks whereas loans from government agencies are acquired by households with lower levels of wealth. They conclude that "wealth matters in gaining access to preferred credit sources" (Binswanger and Rosenzweig, 1986, p. 24). In another study of subsidised rural credit programmes in Brazil, Anderson (1990) attempted to relate the characteristics of farm households to the probability of receiving credit by means of these specialised programmes. Using panel data on 333 farms in the state of Sao Paulo, for the agricultural years 1980-81 to 1982-83, she found that the size of a farm, as measured by the gross value of production, did matter in a bank's willingness to lend and had a positive effect on the probability of receiving a bank loan. Such links between borrower characteristics and access to different sources of credit need to be investigated in more detail.

Formal-Informal Credit Interactions

In what manner has the steady expansion in the flow of formal credit to rural areas affected the scale and structure of the informal credit market? In this regard, the first

interesting finding of this study is that *the growth of formal credit did not lead to a decline in the size of the informal credit market.* Data from the panel of households in Gokilapuram village indicate a large scale expansion of credit in both the formal and informal sectors (Table VI). In each sector, the volume of borrowing increased at a rate of about 50 per cent in real terms between 1977 and 1985. There are many factors that could explain this observation, that include a rapid growth in the demand for credit and the low degree of substitutability between formal and informal credit. In some cases, the growth of formal credit may itself have led to a rise in demand for informal credit as, for example, where a household borrows from informal sources to meet the costs of maintenance of a new asset acquired with a bank loan.

TABLE VI. THE ROLE OF FORMAL CREDIT IN GOKILAPURAM, 1977 AND 1985

Particulars (1)	1977 (2)	1985 (3)
Household with loans from formal sector:	26	49
as per cent of total households	31.3	59.0
Number of formal loans:	37	76
as per cent of total loans	17.8	41.7
Number of informal loans	171	106
Total value of loans from formal sector:	1,97,800	3,07,542
as per cent of all loans	47.5	47.9
Average size of loan from the formal sector	5,346	4,047
Average formal credit per household	7,608	6,407

Note: All values are in 1977 prices; the deflator used is the Index Number of Wholesale Prices for Rural Tamil Nadu.

Although not strictly comparable, it is important to note that our findings of (*a*) a constancy in the share of informal credit in total rural credit and (*b*) a rise in borrowing from informal sources in absolute terms, do not concur with those of a large scale national study on rural indebtedness. From different rounds of the *All India Debt and Investment Survey* (AIDIS), it is estimated that the share of informal credit in aggregate debt outstanding of rural households declined from 85.2 per cent in 1962 to 76.6 per cent in 1972 and - very steeply - to 38.8 per cent in 1982.[11] In brief, the share of the informal sector declined by almost 38 per cent over the last decade. For the decade of the seventies, an absolute fall in the volume of credit outstanding from the informal sector is reported. Based on these national decennial surveys, a recent report concludes that the informal credit market in rural India is shrinking (Centre for Development Studies, 1989, p. 23). Major doubts, however, have been raised about estimates of indebtedness from this data source (Gothoskar, 1988; Narayana, 1989; Prabhu *et al.*, 1988).[12] In particular, it has been argued that the AIDIS survey of 1981-82 under-estimates the absolute number and percentage of rural households that are indebted and consequently under-estimates the total volume of debt.[13] Furthermore, estimates of credit from the informal sector may be less reliable as there was an under-sampling of poorer households in 1981-82, households for whom informal sources of credit may be relatively important.[14]

Of the total credit taken by households in the panel survey, around 48 per cent was accounted for by the formal sector in 1977 and in 1985 (Table VI). This constancy in the aggregate share, however, hides important changes underneath. Associated with the increase in total volume of formal credit to households resident in Gokilapuram village, there was a

doubling of the number of loans issued by the formal sector (from 37 to 76) and an increase in the coverage of formal credit across households. While less than a third of all households received loans from the formal sector in 1977, by 1985, nearly three-fifths of all households had received at least one loan from the formal sector. The average size of a loan from the formal sector, however, declined in real terms as did the average credit per household among households with access to formal credit (Table VI).

While the share of informal lenders in total credit remained unchanged across the eight-year period, the composition of lenders was not constant (Tables VII A and VII B).

TABLE VII A. STRUCTURE OF THE INFORMAL CREDIT MARKET IN GOKILAPURAM, 1977 AND 1985

Type of lender	1977		1985	
	No. of loans	Amount borrowed	No. of loans	Amount borrowed
(1)	(2)	(3)	(4)	(5)
Landlords	14	25,850	17	48,589
	(8.2)	(11.8)	(16.0)	(14.5)
Traders	25	18,690	19	77,047
	(14.6)	(8.9)	(17.9)	(23.0)
Moneylenders	46	1,29,427	36	76,137
	(26.9)	(59.2)	(33.9)	(22.7)
Occasional lenders	76	41,600	28	1,19,747
	(44.4)	(19.0)	(26.4)	(35.8)
Others	10	3,165	6	12,763
	(5.8)	(1.4)	(5.6)	(3.8)
All lenders	171	2,18,732	106	3,34,284
	(100)	(100)	(100)	(100)

Figures in parentheses are percentages to column totals.

Note: All values are in 1977 prices.

Lenders in the informal sector are classified as follows:

Landlords comprise land owning households, whose members do not participate in manual agricultural tasks, and who lend money.

Traders are households engaged in different kinds of business activities, who also lend.

Moneylenders are professional lenders; their primary source of income is from moneylending.

Occasional lenders constitute an amorphous category of lenders who occasionally lend money. It includes several persons identified as 'friends and relatives'.

Others include all other lenders.

TABLE VII B. AVERAGE SIZE OF LOAN BY LENDER, INFORMAL CREDIT MARKET, GOKILAPURAM, 1977 AND 1985

Type of lender	Average loan size (in 1977 rupees)	
	1977	1985
(1)	(2)	(3)
Landlords	1,846	2,858
Traders	748	4,055
Moneylenders	2,814	2,115
Occasional lenders	547	4,277
Others	316	2,127

Note: For definition of lenders, see Table VII A.

Lenders in the informal sector have been classified into five simple categories: moneylenders, traders, landlords, occasional lenders (a category which comprises miscellaneous part time lenders including those identified as 'friends and relatives') and others. An important feature of the change that occurred in the informal sector was that the role of moneylenders declined. The amount borrowed from them as a proportion of credit obtained from the informal sector fell from 59 per cent in 1977 to 23 per cent in 1985. In real terms, the average size of loans issued by moneylenders also declined. The share of loans obtained from traders, landlords and occasional lenders grew in importance. The expansion of lending by merchants and traders, as indicated both by the rising share of trader credit in total credit and the increase in scale of lending, reflects the growing commercialisation of the region, while the expansion of lending by the category of occasional lenders indicates that more people were participating in the informal market as lenders (Table VII B).[15] It is also worth noting that while landlords provided 12 to 15 per cent of total informal credit in the two years, they did not dominate transactions in the informal market. A second notable feature of our data is a *change in the composition of the informal credit market between 1977 and 1985.*

The segmentation or divide between the two sectors is reflected in differences in the cost of credit, particularly the rate of interest. In 1985, for instance, in Gokilapuram village, the weighted average annual rate of interest on loans from the formal sector was 11.3 per cent as compared to 27.9 per cent on loans from the informal sector. A third striking feature of the data from Gokilapuram is that *the gap between interest rates in the formal and informal sectors did not narrow significantly* during the period under study. Loans in the informal sector were charged, on average, a rate of 29.2 per cent in 1977 and the rate declined marginally to 27.9 per cent in 1985. The interest rate gap fell from 20 percentage points in 1977 to 17 points in 1985.[16]

IV

CONCLUDING REMARKS

Although based on the study of a single village in Tamil Nadu, this paper provides some interesting insights into the nature of change in rural credit markets in the context of an expansion in rural banking. At a general level, access to cheap credit from banks and other financial institutions had become easier for households from less wealthy sections of Gokilapuram village over the eight-year period, 1977-85. This was supported by probit estimates of the relation between borrower characteristics and access to bank loan. This dampening of segmentation between the two sectors had a great deal to do with the spread of information; the availability of cheap loans from banks was known widely among the village population. However, such access was often limited and temporary, particularly when channelled through government subsidised programmes. In other words, poorer households gained access to formal credit primarily via programmes such as IRDP that did not ensure them further access to bank credit in the future.[17]

Three aspects of the interaction between formal and informal credit markets were noted. First, evidence on the sectoral distribution of credit in Gokilapuram village during the years 1977 and 1985 showed remarkably little change in the overall share of formal and informal credit in total credit. There was an increase in the amount borrowed from both sectors of the market. Secondly, the composition of the informal credit market altered during this period. Thirdly, interest rates on loans in the informal market remained high and variable and inequalities in the distribution of rural credit persisted.

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NOTES

1. Due to incomplete data on incomes, we are unable to identify a household's status by its annual income.
2. See Bhaduri (1983) on the theoretical model and Swaminathan (1991) on some empirical evidence.
3. The Gini coefficient for the distribution of assets among survey households in Gokilapuram equalled 0.82 in 1977 and had risen to 0.86 in 1985.
4. This deflator is an approximation and has been selected only for the lack of any appropriate deflator for rural assets and debt (see Swaminathan, 1989). The price relative (P 1985/P 1977) equalled 1.9.
5. As the majority of households in both years were indebted to formal lenders or informal lenders or both, it is not unreasonable to begin with the assumption that those without access to banks would have liked to borrow from the formal sector. Of all households, 21 and 14 or 25.3 and 16.9 per cent had no loans outstanding from either sector in 1977 and 1985 respectively.
6. In other words, $y = F(xb)$ or $y_i = b' x_i + u_i$.
The conditional expectation of y_i given x_i or $E(y_i/x_i)$ is:
Prob $(y_i=1)$ = Prob $(u_i > -b' x_i)$

$= 1 - F(-b' x_i) = 1 - F(w)$.

where F is the cumulative distribution function for u. In the probit model, F(.) is assumed to be a standard normal cumulative distribution function.
7. Equations with other explanatory variables are reported in Swaminathan (1989).
8. A linear probability model (LPM) gave similar results with a positive significant asset coefficient for 1977 (at 5 per cent level of significance) and no significant variables in the equation for 1985.
9. A recent study on rural credit, based on data from the Philippines, that looks at some related issues on informal and formal credit is Floro and Yotopoulos (1991).
10. The data are from the ICRISAT village level studies programme.
11. The corresponding figures for Tamil Nadu were 86.8 per cent, 77.9 per cent and 55.7 per cent respectively.
12. A big difference, for example, has been noted between the estimates of the proportion of indebted households obtained from the state and central samples.
13. Note that the largest decline in the number of indebted households between 1971 and 1981 is reported to occur in the lower asset groups (Prabhu *et al.*, 1988).
14. For instance, non-cultivators and small cultivators who accounted for 50 per cent of the sample in each village constituted at least 80 per cent of village households (Narayana, 1989).
15. Historically, unlike certain other regions, moneylending has not been the prerogative of a particular caste or community in Gokilapuram.
16. For details on interest rates changes by source and type of loan, see Swaminathan (1991).
17. There is the associated issue of the sustainability of subsidised credit programmes, particularly under conditions of high default. With high levels of default, a reduction in external funds is likely to adversely affect the flow of formal credit to rural areas through these special programmes.

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